

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims

Claim 1 (currently amended): A composition for the treatment of post-surgical articular or incisional pain or discomfort consisting essentially of an aqueous dispersion of insoluble non-crosslinked type I fibrillar atelopeptide collagen and a pharmaceutical agent selected from the group consisting of anesthetics, analgesics, antibiotics, sedatives, opioids and antitumor agents; wherein the composition is formulated to release an effective amount of the pharmaceutical agent from the collagen for at least 48 hours, and wherein the collagen and pharmaceutical agent are in a ratio of from about 0.5:1 to about 10:1 collagen:pharmaceutical agent.

Claim 2 (original): The composition of claim 1, wherein the pharmaceutical agent is soluble.

Claim 3 (original): The composition of claim 1, wherein the composition is formulated to release an effective amount of the pharmaceutical agent from the collagen for at least 72 hours.

Claim 4 (currently amended): The composition of claim 1, wherein the ~~ratio of~~ collagen ~~to~~ and pharmaceutical agent ~~is~~ are in a ratio of from about ~~0.5:1~~ 1:1 to about ~~50:1~~ 5:1 collagen:pharmaceutical agent.

Claim 5 (currently amended): The composition of claim 4, wherein the ~~ratio of~~ collagen ~~to~~ and pharmaceutical agent ~~is~~ are in a ratio of about 1:1 collagen:pharmaceutical agent.

Claim 6 (original): The composition of claim 1, wherein the collagen consists essentially of at least 95% Type I non-crosslinked fibrillar atelopeptide collagen.

Claim 7 (currently amended): The composition of claim 1, wherein the collagen ~~contains 5% or is less than 5% of~~ Type III collagen.

Claim 8 (original): The composition of claim 1, wherein the pharmaceutical agent is an anesthetic.

Claim 9 (original): The composition of claim 8, wherein the anesthetic is bupivacaine, lidocaine, procaine, procainamide, tetracaine, mepivacaine, or etidocaine.

Claim 10 (original): The composition of claim 1, wherein the collagen is human collagen or bovine dermal collagen.

Claim 11 (withdrawn): The composition of claim 1, wherein the pharmaceutical agent is an opioid.

Claim 12 (withdrawn): The composition of claim 11, wherein the opioid is morphine, codeine, demerol, or methadone.

Claim 13 (withdrawn): The composition of claim 1, wherein the pharmaceutical agent is a sedative.

Claim 14 (withdrawn): The composition of claim 13, wherein the sedative is diazepam or flurazepam.

Claim 15 (withdrawn): The composition of claim 1, wherein the pharmaceutical agent is an antitumor agent.

Claim 16 (withdrawn): The composition of claim 15, wherein the antitumor agent is methotrexate or tamoxifen.

Claim 17 (withdrawn): The composition of claim 1, wherein the pharmaceutical agent is an antibiotic.

Claim 18 (currently amended): The composition of claim 1, wherein the ~~concentration~~ of collagen is at a concentration of from about 3 mg/ml to about 100 mg/ml.

Claim 19 (currently amended): The composition of claim 18, wherein the ~~concentration~~ of collagen is at a concentration of about 65 mg/ml.

Claim 20 (currently amended): The composition of claim 18, wherein the ~~concentration~~ of collagen is at a concentration of from about 16 mg/ml to about 28 mg/ml.

Claim 21 (currently amended): The composition of claim 1, wherein the ~~concentration~~ of pharmaceutical agent is at a concentration of about 4-30 mg/ml.

Claim 22 (currently amended): The composition of claim 21, wherein the ~~concentration~~ of pharmaceutical agent is at a concentration of from about 4 mg/ml to about 10 mg/ml

Claim 23 (currently amended): The composition of claim 1, wherein the ~~a~~ total amount of pharmaceutical agent released is from about 5 mg to 1g.

Claim 24 (currently amended): The composition of claim 1, wherein the effective amount of pharmaceutical agent released is from about 2-15 mg per day.

Claim 25 (currently amended): The composition of claim 24, wherein the effective amount of pharmaceutical agent released is about 10 mg per day.

Claim 26 (currently amended): The composition of ~~any of claims~~ claim 1, further ~~including~~ comprising one or more pharmaceutically acceptable excipient(s).

Claim 27 (currently amended): A composition for the treatment of post-surgical articular or incisional pain or discomfort consisting essentially of an aqueous dispersion of insoluble non-crosslinked type I fibrillar atelopeptide collagen and bupivacaine; wherein the composition is formulated to release an effective amount of bupivacaine from the collagen for at least 48 hours, and wherein the collagen and bupivacaine are in a ratio of from about 0.5:1 to about 10:1 collagen:bupivacaine.

Claim 28 (original): The composition of claim 27, wherein the bupivacaine is soluble.

Claim 29 (original): The composition of claim 27, wherein the composition is formulated to release an effective amount of bupivacaine from the collagen for at least 72 hours.

Claim 30 (currently amended): The composition of claim 27, wherein the ~~ratio of~~ collagen and to bupivacaine are in a ratio of is from about ~~0.5:1~~ 1:1 to about ~~50:1~~ 5:1 collagen:bupivacaine.

Claim 31 (currently amended): The composition of claim 30, wherein the ~~ratio of~~ collagen and to bupivacaine are in a ratio of is from about ~~1:1~~ 3:1 to about ~~5:1~~ 4.7:1 collagen:bupivacaine.

Claim 32 (original): The composition of claim 27, wherein the collagen consists essentially of at least 95% Type I non-crosslinked fibrillar atelopeptide collagen.

Claim 33 (currently amended): The composition of claim 27, wherein the collagen ~~contains 5% or~~ is less than 5% of Type III collagen.

Claim 34 (currently amended): The composition of claim 27, wherein the ~~concentration of~~ collagen is at a concentration of from about 10 mg/ml to about 100 mg/ml.

Claim 35 (currently amended): The composition of claim 34, wherein the ~~concentration of~~ collagen is at a concentration of about 65 mg/ml.

Claim 36 (currently amended): The composition of claim 34, wherein the ~~concentration of~~ collagen is at a concentration of from about 16 mg/ml to about 28 mg/ml.

Claim 37 (currently amended): The composition of claim 27, wherein the ~~concentration of~~ bupivacaine is at a concentration of about 4-30 mg/ml.

Claim 38 (currently amended): The composition of claim 37, wherein the ~~concentration of~~ bupivacaine is at a concentration of from about 4 mg/ml to about 10 mg/ml

Claim 39 (currently amended): The composition of claim 27, wherein ~~the~~ a total amount of bupivacaine released is from 5 mg to 1g.

Claim 40 (currently amended): The composition of claim 27, wherein the effective amount of bupivacaine released is about 2-15 mg per day.

Claim 41 (original): The composition of claim 27, further ~~including~~ comprising one or more pharmaceutically acceptable excipients.

Claim 42 (withdrawn): A method for the treatment of post-surgical pain or discomfort in a joint(s) comprising the step of

intra-articularly administering to a joint(s) in a patient a composition consisting essentially of an aqueous dispersion of insoluble non-crosslinked Type I fibrillar atelopeptide collagen and a pharmaceutical agent selected from the group consisting of anesthetics, analgesics, antibiotics, sedatives, opioids and antitumor agents, wherein the composition is formulated to release an effective amount of the pharmaceutical agent from the collagen for at least 48 hours, and wherein the composition is administered before, during or after a surgical procedure.

Claim 43 (withdrawn): The method of claim 42, wherein the joint is a knee, shoulder, ankle, hip, wrist, elbow or temporomandibular joint.

Claim 44 (withdrawn): The method of claim 43, wherein the joint is a knee.

Claim 45 (withdrawn): The method of claim 42, wherein the patient is a human or veterinary patient.

Claim 46 (withdrawn): The method of claim 45, wherein the patient is a human.

Claim 47 (withdrawn): The method of claim 42, wherein the composition is administered before the surgical procedure.

Claim 48 (withdrawn): The method of claim 47, wherein the method further comprises the step of at least one additional administration of the composition during or after the surgical procedure.

Claim 49 (withdrawn): The method of claim 42, wherein the composition is administered during the surgical procedure.

Claim 50 (withdrawn): The method of claim 42, wherein the composition is administered after the surgical procedure.

Claim 51 (withdrawn): The method of claim 42, wherein the composition is administered via a catheter.

Claim 52 (withdrawn): The method of claim 42, wherein the surgical procedure is arthroscopy, arthrotomy, implantation of chondrocytes, implantation of cartilage, partial joint arthroplasty or total joint arthroplasty

Claim 53 (withdrawn): The method of claim 42, wherein the surgical procedure is used in the treatment of a condition selected from the group consisting of meniscal injury, anterior cruciate ligament injury, rotator cuff injury, carpal tunnel syndrome, synovitis, chondromalacia, patellar tendon rupture, tibial tubercle fracture, loose bodies of bone or cartilage, osteochondritis dissecans, adhesive capsulitis, impingement syndrome, shoulder dislocation, Dupuytren's syndrome, scaphoid fracture, stenosing tenosynovitis, lateral facet syndrome, anterior patello-femoral pain syndrome, lateral pressure syndrome, malalignment syndrome, and maltracking syndrome.

Claim 54 (withdrawn): The method of claim 42, wherein the condition is not a degenerative articular process.

Claim 55 (withdrawn): The method of claim 42, wherein the composition is formulated to release an effective amount of the pharmaceutical agent from the collagen for at least 72 hours.

Claim 56 (withdrawn): The method of claim 42, wherein the ratio of collagen to pharmaceutical agent is from about 0.5:1 to about 50:1.

Claim 57(withdrawn): The method of claim 42, wherein the collagen consists essentially of at least 95% Type I non-crosslinked fibrillar atelopeptide collagen.

Claim 58 (withdrawn): The method of claim 42, wherein the collagen contains 5% or less of Type III collagen.

Claim 59 (withdrawn): The method of claim 42, wherein the pharmaceutical agent is an anesthetic.

Claim 60 (withdrawn): The method of claim 59, wherein the anesthetic is bupivacaine, lidocaine, procaine, procainamide, tetracaine, mepivacaine, or etidocaine.

Claim 61 (withdrawn): The method of claim 42, wherein the collagen is human collagen or bovine dermal collagen.

Claim 62 (withdrawn): The method of claim 42, wherein the pharmaceutical agent is an opioid.

Claim 63 (withdrawn): The method of claim 62, wherein the opioid is morphine, codeine, demerol, or methadone.

Claim 64 (withdrawn): The method of claim 42, wherein the pharmaceutical agent is a sedative.

Claim 65 (withdrawn): The method of claim 64, wherein the sedative is diazepam or flurazepam.

Claim 66 (withdrawn): The method of claim 42, wherein the pharmaceutical agent is an antitumor agent.

Claim 67 (withdrawn): The method of claim 66, wherein the antitumor agent is methotrexate or tamoxifen.

Claim 68 (withdrawn): The method of claim 42, wherein the concentration of collagen is from about 3 mg/ml to about 100 mg/ml.

Claim 69 (withdrawn): The method of claim 42, wherein the concentration of pharmaceutical agent is about 4-30 mg/ml.

Claim 70 (withdrawn): The method of claim 69, wherein the concentration of pharmaceutical agent is from about 4 mg/ml to about 10 mg/ml

Claim 71 (withdrawn): The method of claim 42, wherein the total amount of pharmaceutical agent released is from about 5 mg to 1g.

Claim 72 (withdrawn): The method of claim 42, wherein the amount of pharmaceutical agent released is from about 2-15 mg per day.

Claim 73 (withdrawn): The method of claim 72, wherein the amount of pharmaceutical agent released is about 10 mg per day.

Claim 74 (withdrawn): The method of claim 42, wherein the amount of composition administered is greater than 2 mL.

Claim 75 (withdrawn): The method of claim 42, wherein the composition further includes one or more pharmaceutically acceptable excipient(s).

Claim 76 (withdrawn): A method for the treatment of post-surgical pain or discomfort associated with one or more incisions comprising the step of

administering to a patient's incision(s) a composition consisting essentially of an aqueous dispersion of insoluble non-crosslinked type I fibrillar atelopeptide collagen and a

pharmaceutical agent selected from the group consisting of anesthetics, analgesics, antibiotics, sedatives, opioids and antitumor agents, wherein the composition is formulated to release an effective amount of the pharmaceutical agent from the collagen for at least 48 hours, and wherein the composition is administered before, during or after a surgical procedure.

Claim 77 (withdrawn): The method of claim 76, wherein the surgical procedure is an abdominal, spinal or breast operation.

Claim 78 (withdrawn): The method of claim 77, wherein the abdominal operation is a cesarean birth, hernia repair, or hysterectomy.

Claim 79 (withdrawn): The method of claim 76, wherein the composition is administered via injection.

Claim 80 (withdrawn): The method of claim 76, wherein the patient is a human or veterinary patient.

Claim 81 (withdrawn): The method of claim 80, wherein the patient is a human.

Claim 82 (withdrawn): The method of claim 76, wherein the composition is administered before the surgical procedure.

Claim 83 (withdrawn): The method of claim 82, wherein the method further comprises the step of at least one additional administration of the composition during or after the surgical procedure.

Claim 84 (withdrawn): The method of claim 76, wherein the composition is administered during the surgical procedure.

Claim 85 (withdrawn): The method of claim 76, wherein the composition is administered after the surgical procedure.

Claim 86 (withdrawn): The method of claim 76, wherein the composition is administered via a catheter.

Claim 87 (withdrawn): The method of claim 76, wherein the pharmaceutical agent is an anesthetic.

Claim 88 (withdrawn): The method of claim 87, wherein the anesthetic is bupivacaine.

Claim 89 (withdrawn): A method for the treatment of post-surgical pain or discomfort in a joint(s) comprising the step of

intra-articularly administering to a joint(s) in a patient a composition consisting essentially of an aqueous dispersion of insoluble non-crosslinked Type I fibrillar atelopeptide collagen and bupivacaine, wherein the composition is formulated to release an effective amount of bupivacaine from the collagen for at least 48 hours, and wherein the composition is administered before, during or after a surgical procedure.

Claim 90 (withdrawn): The method of claim 89, wherein the joint is a knee, shoulder, ankle, hip, wrist, elbow or temporomandibular joint.

Claim 91 (withdrawn): The method of claim 90, wherein the joint is a knee.

Claim 92 (withdrawn): The method of claim 89, wherein the patient is a human or veterinary patient.

Claim 93 (withdrawn): The method of claim 92, wherein the patient is a human.

Claim 94 (withdrawn): The method of claim 89, wherein the composition is administered before the surgical procedure.

Claim 95 (withdrawn): The method of claim 94, wherein the method further comprises the step of at least one additional administration of the composition during or after the surgical procedure.

Claim 96 (withdrawn): The method of claim 89, wherein the composition is administered during the surgical procedure.

Claim 97 (withdrawn): The method of claim 89, wherein the composition is administered after the surgical procedure.

Claim 98 (withdrawn): The method of claim 89, wherein the composition is administered via a catheter.

Claim 99 (withdrawn): The method of claim 89, wherein the surgical procedure is arthroscopy, arthrotomy, implantation of chondrocytes, implantation of cartilage, partial joint arthroplasty or total joint arthroplasty

Claim 100 (withdrawn): The method of claim 89, wherein the surgical procedure is used in the treatment of a condition selected from the group consisting of meniscal injury, anterior cruciate ligament injury, rotator cuff injury, carpal tunnel syndrome, synovitis, chondromalacia, patellar tendon rupture, tibial tubercle fracture, loose bodies of bone or cartilage, osteochondritis dissecans, adhesive capsulitis, impingement syndrome, shoulder dislocation, Dupuytren's syndrome, scaphoid fracture, stenosing tenosynovitis, lateral facet syndrome, anterior patello-femoral pain syndrome, lateral pressure syndrome, malalignment syndrome, and maltracking syndrome.

Claim 101 (withdrawn): The method of claim 89, wherein the composition is formulated to release an effective amount of bupivacaine from the collagen for at least 72 hours.

Claim 102 (withdrawn): The method of claim 89, wherein the ratio of collagen to bupivacaine is from about 0.5:1 to about 50:1.

Claim 103 (withdrawn): The method of claim 89, wherein the collagen consists essentially of at least 95% Type I non-crosslinked fibrillar atelopeptide collagen.

Claim 104 (withdrawn): The method of claim 89, wherein the collagen contains 5% or less of Type III collagen.

Claim 105 (withdrawn): The method of claim 89, wherein the collagen is human collagen or bovine dermal collagen.

Claim 106 (withdrawn): The method of claim 89, wherein the concentration of collagen is from about 3 mg/ml to about 100 mg/ml.

Claim 107 (withdrawn): The method of claim 89, wherein the concentration of bupivacaine is about 4-30 mg/ml.

Claim 108 (withdrawn): The method of claim 107, wherein the concentration of bupivacaine is from about 4 mg/ml to about 10 mg/ml

Claim 109 (withdrawn): The method of claim 89, wherein the total amount of bupivacaine released is from about 5 mg to 1g.

Claim 110 (withdrawn): The method of claim 89, wherein the amount of bupivacaine released is from about 2-15 mg per day.

Claim 111 (withdrawn): The method of claim 110, wherein the amount of bupivacaine released is about 10 mg per day.

Claim 112 (withdrawn): The method of claim 89, wherein the amount of composition administered is greater than 2 mL.

Claim 113 (withdrawn): The method of claim 89, wherein the composition further includes one or more pharmaceutically acceptable excipient(s).

Claim 114 (withdrawn): A catheter for use in the treatment of articular injury, the catheter comprising a lumen and being adapted for use in arthroscopy or arthrotomy, wherein the catheter comprises in its lumen a composition of claim 1.